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FEDERAL COMMUNICATIONS COMMISSION
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**Rulemaking to Amend Part 1
and Part 21 of the Commission's
Rules to Redesignate the 27.5 -
29.5 GHz Frequency Band and to
Establish Rules and Policies for
Local Multipoint Distribution
Service**

CC Docket No. 92-297

Terrestrial broadband wireless systems have the potential to make available a wide variety of consumer and business services. For this reason, BellSouth is participating in a research project to analyze the technical and commercial feasibility of both one-way and bi-directional telecommunications services using 28 GHz frequencies. BellSouth has assembled a design team to analyze the feasibility of a variety of wireless

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broadband services, including services based on both one-way and two-way telecommunications transport models. The experimental authorization necessary to commence the first phase of the wireless broadband test program has been granted by the Commission to Texas Instruments Incorporated ("TI"). ^{1/} BellSouth has also applied for a separate experimental authorization to test further aspects of the technical and commercial feasibility of wireless broadband services. ^{2/} Only two other field applications of wireless broadband systems have been demonstrated to date, one in the United States and one in the United Kingdom. These applications, including the Suite 12 Group's FM system operating in New York, differ from BellSouth's proposal because they involved only a single transmitter and primarily one-way only service.

Based on its Local Multipoint Distribution Service ("LMDS") development program, BellSouth believes that it should be granted membership on the Advisory Committee. As currently configured, every major LMDS player, except BellSouth, has membership on the Committee. Since BellSouth submitted its initial comments, it has become a developer of LMDS services and applications, as well as an applicant for an experimental LMDS license. Thus, as indicated in the Commission's Public Notice,

^{1/} See File No. S-1417-EX-93. TI developed the equipment being used in its experimental program.

^{2/} BellSouth will use the TI-developed experimental equipment to test various applications of broadband wireless technology.

BellSouth is a potentially affected interest and should be added to the Advisory Committee. ^{3/}

BellSouth's appointment will bring to the Committee the benefits of BellSouth's unique knowledge gained from its LMDS development program. Furthermore, the current members of the Committee will not adequately represent the interests of BellSouth and any similarly positioned LMDS developers.

Subject to the outcome of its experimental program, BellSouth plans to bid for LMDS licenses in a number of service areas and to construct and operate LMDS systems commercially. BellSouth is a potential large-scale LMDS service provider. Its perspective on LMDS is unique in that it hopes to offer a broad range of services to business and residential customers based on, in part, information gathered as a result of its experimental program. As a major wireline and wireless telecommunications service provider, BellSouth can also provide the Committee with useful perspective on the job creation potential of this new service.

Moreover, the members to the Committee representing satellite interests are generally opposed to the use of 28 GHz for LMDS licensing. Thus, the developers and equipment manufacturers currently on the Committee represent different technological positions which may be inconsistent with the findings of the

^{3/} See 59 Fed. Reg. 7961, 7962 (identifying developers, manufacturers, LMDS licensees, certain mobile-satellite applicants, and fixed satellite service applicants and service providers for membership on the Advisory Committee).

BellSouth development program. Every other entity that has engaged in a substantial LMDS development program is a member of the Advisory Committee.

Finally, the Advisory Committee as currently constituted is weighted in favor of satellite interests.^{4/} Nearly half of the members represent satellite interests that oppose LMDS licensing on 28 GHz. Moreover, Craig O. McCaw and William H. Gates have announced yet another satellite proposal, in the name of Teledesic Corp.,^{5/} which would likewise be expected to oppose LMDS usage of this spectrum. Given that the objective of an advisory committee is to reach a consensus, balanced representation is essential.

This over-representation by satellite interests requires a proportional representation by LMDS proponents, such as BellSouth. Only three potential LMDS bidders (Bell Atlantic, Suite 12, and Video/Phone) have previously been identified as

^{4/} The membership of the Advisory Committee can be characterized as follows: seven members representing satellite interests (NASA, Ellipsat, Motorola, Constellation, Loral/Qualcomm, AMSC, and Hughes); four members representing developers (Video/Phone, Endgate, Sarnoff, and TRW); one member representing a manufacturer (GHZ); two members representing educational interests (University of Texas and PBS); one member representing the government (FCC), one Regional Bell Operating Company (Bell Atlantic); one member representing an LMDS licensee/developer (Suite 12); and a frequency coordinator (Comsearch).

^{5/} See E.L. Andrews, A Satellite System is Planned to Link Most of the Globe, New York Times, A1 (March 21, 1994); J.J. Keller, McCaw, Gates Plan to Build Data Network, Wall St. J., A3 (March 21, 1994); S. Sugawara, Satellite Network Seeks to Link Remote Areas, Washington Post, A7 (March 21, 1994).

Advisory Committee members. As a service developer, experimental LMDS applicant, and a potential LMDS bidder, BellSouth is uniquely qualified to serve on the Advisory Committee. The presence of BellSouth will help balance the interests represented.

BellSouth certifies that if it is appointed to membership, it will actively participate in good faith to consider and develop the LMDS rules under consideration. Further, if it is appointed, BellSouth's representative on the Advisory Committee will be Melvin D. Frerking, Senior Manager, Strategic Technology, BellSouth Wireless, Inc. Mr. Frerking has twelve years of experience in the telecommunications field. Mr. Frerking will be able to draw upon his experience and the knowledge and expertise of numerous other BellSouth professionals dedicated to the goal of making LMDS a reality. A copy of his qualifications is attached.

Accordingly, BellSouth requests appointment to the Advisory Committee tasked with negotiating and developing proposed LMDS Rules.

Respectfully submitted,

BELLSOUTH CORPORATION

By:


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March 21, 1994

Qualifications of:

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Education: BSEE 1970, South Dakota School Mines & Technology
Graduate work toward MSEE, Georgia Tech

Other: Commercial General Radiotelephone License
Amateur Advanced Class Radio License
IEEE Member, Communications Society and VTS

Relevant Work Experience:

Radio technology analysis and support (1985-94) to various
BellSouth entities

- responsible for the creation of wireless trials to support corporate PCS research activities
- responsible for evaluating proposed terrestrial and satellite based radio systems for potential business ventures and competitive impact
- responsible for the evaluation of digital cellular (TDMA & CDMA) and PCS radio system air interfaces to support new system implementations and conversions of existing cellular systems to digital
- responsible for supporting international cellular license tenders
- responsible for providing technical content of corporate positions on FCC related regulatory activities
- served as representative to TIA TR45.5 (CDMA) standards subcommittee

- served as representative to CTIA subcommittees addressing CDMA as a digital cellular alternative

Radio engineering (1981-84) with Southern Bell, Georgia Area

- responsible for engineering point to point microwave radio systems, radio paging systems, telephone maintenance radio systems, and IMTS systems.